**TERMS OF REFERENCE**

**Scaling Up Resilient Infrastructure Project**

**CIVIL ENGINEER FOR SEIZMIC ASSESSMENT**

**1 BACKGROUND**

The Republic of Serbia, Public Investment Management Office (PIMO), has received funds for Scaling Up Resilient Infrastructure Project realization, provided by Japan, under Multi Donor Trust Fund for Mainstreaming Disaster and Climate Risk Management in Developing Countries, GFDDR Grant no. A7621, administered by International Bank for Reconstruction and Development/ International Development Association (“World Bank”).

Scaling Up Resilient Infrastructure Project is part of the realization of the National Disaster Risk Management Program, specifically Component 3 - Structural and non-structural risk reduction measures, and is aligned with the National Disaster Risk Management Action Plan.

Serbia’s National Disaster Risk Management Program (NDRMP) was approved in December 2014. NDRMP is aimed at supporting the Government of Serbia to build a comprehensive program for disaster resilience, showing commitment to changing the Government’s approach to address disaster and climate risk. The NDRMP is fully aligned with the Sendai Framework 2015–2030 which was adopted by United Nations (UN) Member States on March 18, 2015 at the Third UN World Conference on Disaster Risk Reduction in Japan.

As a part of NDRMP, Scaling Up Resilient Infrastructure Project is support for Recipient in developing a system to incorporate risk information in sector investment planning with focus on risk infrastructures, which is practically the basis for a development of a risk management policy.

The Project consists of the following parts:

Component 1: Institutional Building and Capacity Strengthening

Component 2: Developing Risk-informed Investment Planning Platform

Component 3: Piloting Risk-informed Investment Planning Platform

In order to achieve objectives of the Scaling Up Resilient Infrastructure Project, the recipient of the grant, PIMO, intends to engage a Seismic Expert for Seismic Risk Assessment.

**2 OBJECTIVE OF THE ASSIGNMENT**

Republic of Serbia established a system for school risk information in investment planning with focus on a seismic vulnerability and risk.

Under the direct supervision of seismic risk consultant, and with guidance by the project coordinator and Task Team Leader, the selected experts will be responsible for the activities given in the following chapter.

**3 DETAILED ACTIVITY BREAKDOWN**

* Providing technical and field support for a pilot activity related to case study - seismic risk assessment and seismic retrofitting of schools;
* Practical application of seismic risk assessment methodology that consists of two stages of seismic risk evaluation (desk review and field visit);
* Input, compilation and validation of data from technical questionnaires for up to 30 municipalities;
* Analysis of data, valorization (desk review) of candidate buildings;
* Appointing of meetings with school representatives according to site visit program;
* On-site inspection of up to 80 selected buildings;
* Filling the technical questionnaires for each school object;
* Processing of collected data into summary tables.

**4 DELIVERABLES**

Before site visits, the Consultant shall prepare a Site visit plan including a valorization spreadsheet for each school. Site visit plan will be approved by PIMO Deputy Director and Seizmic Engineer.

For each school the Consultant shall prepare:

An INDIVIDUAL SCHOOL REPORT for each of the schools that comprises the following:

• Report on review of existing data (preliminary questionnaire), including extracting the most important data to the summary table;

• Site visit report including all the pictures taken and list of collected technical documentation;

• Filled technical questionnaire.

As a summary of all activities the Consultant should prepare **FINAL REPORT** that will comprise:

• Report on the preliminary selection of buildings, including the valorization spreadsheet

• Report on scheduled visits according to site visit plan

• Final report including extract of all the data from the technical questionnaires to the summary table for the final seismic risk ranking.

List of all schools that need to be visited will be attached to this TOR. The Consultant shall visit approximately 60-80 schools. The final list of schools that need to be inspected will be attached to the Contract. The Consultant shall submit a financial offer based on unit price per school.

**5 QUALIFICATIONS**

* University degree in civil engineering or architecture;
* Three years of relevant professional experience, or equivalent combination of education and experience;
* Familiar with the building design codes for buildings in seismic areas and seismic hazard assessment practice;
* Possession of Serbian engineering license 310 or 300 will be considered as an advantage;
* Good understanding of community, institutional and government roles and responsibilities;
* Experience in surveys, inspection and design for rehabilitation of public-use buildings.
* Experience in projects funded by international organizations;
* First-rate analytical, writing and speaking skills in English and Serbian;
* Experience from working individually and in team;
* Computer skills in Microsoft Office (particularly Word, Excel).

**6 REPORTING**

Consultant(s) shall submit all reports to the PIMO Deputy Director responsible for contract implementation and approval of deliverables.

**7 DURATION**

The Consultant(s) should be engaged in period February 2020 – June 2020

**8 PAYMENT SCHEDULE**

The Consultants will be paid in accordance with the following payment schedule:

1. Advance payment, 10 % of the Total Price upon Contract signing;
2. 30 % of the Total Contract price upon visits and inspections of 50% of the schools, listed in the Site visit plan;
3. 60% of the Total Contract Price, upon submission and acceptance of the Final Report.